UNITED STATES DISTRICT COURT FOR THE DISTRICT OF VERMONT

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JULIET BETH BUCK, RAY GONDA, and	DEFUSI DEER A
STOP THE F-35 COALITION,)
)
Plaintiffs,)
V.) Case No. 5:14-cv-132
)
CITY OF WINOOSKI,)
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Intervenor Plaintiff,)
V.	
DEBORAH LEE JAMES, Secretary of)
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the Air Force,	
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Defendant.)

<u>DECISION ON CROSS-MOTIONS FOR SUMMARY JUDGMENT</u> (Docs. 42, 45, 54)

In 1993, the United States Air Force started work on the development of a "next generation" single-seat fighter plane to replace the F-16, the A-10, and other aircraft.

(AR 00010505, Final Environmental Impact Statement at 1-3.)¹ The goal was to design a single plane which could be altered to meet the needs of different branches of the military. Following a competition, Lockheed-Martin was selected as the manufacturer. Development of the plane

¹ The administrative record ("AR") includes the 2013 Final Environmental Impact Statement ("EIS") at issue in this case. The EIS consists of two volumes, containing nine chapters and five appendices totaling more than 2,000 pages. Chapter 4 of the EIS contains sections on specific military bases, one of which—section "BR"—concerns the Burlington, Vermont Air Guard Station.

known as the F-35A Lightning II ("F-35") began in earnest in 2001.² The F-35 is now in the early stages of production and deployment in the United States and in some ten other countries which are also purchasing it.

The Burlington Air Guard Station has been in operation at its present location on the grounds of the Burlington International Airport since 1946. Over the years it has housed a variety of military aircraft. (AR 00010720, EIS at BR4-94.) The base is currently home to eighteen F-16 fighter planes, and is located in South Burlington, Vermont. The Air Guard station is separated from the civilian airport by runways which it shares with general aviation and commercial aircraft. The Vermont Air National Guard ("VANG") plans to replace the aging F-16 fleet with new F-35 aircraft. The Air Force has selected the Burlington station as one of five locations for the initial basing of the F-35.

In June 2014, Plaintiffs³ filed this suit against Air Force Secretary Deborah Lee James, alleging that, in preparing the EIS concerning the decision about where to base the F-35 aircraft, the Air Force failed to conduct the "hard look" required under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321–4370m-12. (*See* Doc. 1.) The City of Winooski joined the suit as an intervenor-plaintiff. (Doc. 23.) All parties have filed motions for partial summary judgment. (*See* Docs. 42, 45, 54.) The City of South Burlington, as amicus curiae, has also filed a Memorandum in Limited Support of Plaintiffs' Motions for Summary Judgment. (Doc. 70.)

² The F-35 appears in different models depending on the needs of each branch. The Air Force version at issue in this case is the F-35A. For ease of reference, the court will refer to the aircraft as the F-35. There is no plan to base the versions developed for the Marine Corps or the Navy in Burlington.

³ The individual Plaintiffs reside in the vicinity of the Burlington International Airport; Plaintiff "Stop the F-35 Coalition" describes itself as an unincorporated association that was "formed to protect its members and other residents . . . from the noise, health risks, housing impacts, crash risk, loss of property value, and other harms and risks associated with introduction of F-35 aircraft." (Doc. 25 at 3–4.)

The Greater Burlington Industrial Corporation, as amicus curiae, filed a memorandum opposing both Plaintiffs' and City of Winooski's motions for summary judgment. (Doc. 53.) The court heard argument on the motions on July 5, 2016, at which time the motions were taken under advisement.

SCOPE AND PREPARATION OF THE EIS

This case began on December 30, 2009, when the Air Force, Air Combat Command, and Air National Guard published a notice in the Federal Register of the agencies' intent to prepare an EIS in order "to assess the potential environmental impacts of establishing operational F-35 Joint Strike Fighter (JSF) aircraft at one or more existing Air Force installations within the continental United States." (AR 00000001.) The notice identified the Burlington Air Guard Station as one of five proposed locations. The notice announced public meetings concerning the scope of the EIS in the affected communities, including a meeting in Winooski, Vermont.

In August 2010, the Air Force released a preliminary draft of the EIS. Successive drafts and revisions followed until the final EIS issued in August 2013. (AR 00009516.)

The EIS is an extensive document which covers a large number of environmental concerns and issues. These include the construction of new hangar facilities, effects on traffic, noise from aircraft operations, contamination of the atmosphere and the soil, automobile traffic, and a host of other potential impacts. Most of the issues addressed in the EIS are irrelevant to this case. Plaintiffs have identified six areas in which they allege the EIS fails to give sufficient consideration to the environmental consequences of siting the F-35s in Burlington. The court will consider each claim separately. Before reaching these issues, however, it is necessary to discuss the nature of the review that the court is required to perform under NEPA.

NEPA REVIEW

In 1970, President Nixon signed NEPA into law. *See* Presidential Statement on Signing the National Environmental Policy Act of 1969, 6 Weekly Comp. Pres. Doc. 11–13 (Jan. 1, 1970). Unlike substantive protective measures such as the Clean Air Act, 42 U.S.C. §§ 7401–7671q, or the Clean Water Act, 33 U.S.C. §§ 1251–1388, which authorize the Environmental Protection Agency to set standards for emissions and discharges, NEPA is concerned with methodology. It neither contains nor authorizes substantive limits on governmental activity. Instead, it requires the preparation of an EIS by any federal agency that intends to take action which has a significant effect on the environment. *See* 42 U.S.C. § 4332(2)(C). Specifically, NEPA requires that, "to the fullest extent possible":

all agencies of the Federal Government shall... include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.
- Id. More concrete guidance about the nature and scope of an EIS is provided by rules promulgated by the Council on Environmental Quality ("CEQ"). These appear at 40 C.F.R. §§ 1500.1–1518.4.

NEPA contains no private cause of action or enforcement mechanism. Instead, the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701–706, provides the same private

equitable remedy for enforcement of NEPA as for other federal legislation. Through the vehicle of review under the APA, the courts have authority to determine two fundamental issues under NEPA:

- a. Did the federal agency prepare an EIS which takes a "hard look" at the environmental consequences of its proposed action? *See Kleppe v. Sierra Club*, 427 U.S. 390 (1976).
- b. Does the agency's decision to proceed following a review of the environmental consequences violate the prohibition within the APA against actions which are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law? *See* 5 U.S.C. § 706.

It is most commonly through the first requirement—the "hard look" by an agency into its own actions—that NEPA achieves the "action-forcing procedure," which protects the environment by requiring the collection and public release of detailed information about likely environmental consequences of proposed action. *See Robertson v. Methow Valley Citizens*Council, 490 U.S. 332, 348 (1989). NEPA embodies a legislative judgment—at once pragmatic and optimistic—that governmental action will protect the environment if decision-makers within the executive branch are required to address environmental issues in a public setting through preparation of an EIS.

The role of the courts in enforcing the requirements of NEPA is limited and deferential. Judges are not authorized to substitute their own judgment about the merits of the proposed action. The appropriate inquiry is into method, not outcome, and the agency's final decision about the risks, costs, and benefits of a particular cause of action is not lightly overturned. As this case demonstrates, the force and impact of NEPA are derived from the requirement of a serious and complete inquiry into the environmental consequences of a proposed action.

Judicial review in the context of NEPA is generally confined to the administrative record compiled by the agency when it made the decision at issue. *See Vt. Pub. Interest Research Grp.* v. U.S. Fish & Wildlife Serv., 247 F. Supp. 2d 495, 514 (D. Vt. 2002). Such review requires a

close examination of the EIS and its supporting documents to answer the questions of whether the EIS was sufficiently searching and detailed in its consideration of environmental consequences. Additionally, the reviewing court must consider whether the agency action—considered in the light of the environmental concerns raised by the EIS—is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" as prohibited by the APA. 5 U.S.C. § 706(2)(A).

Summary judgment is almost always the procedural rule through which these legal determinations can be made. Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). When addressing cross-motions for summary judgment, the court "evaluate[s] each party's motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration." Byrne v. Rutledge, 623 F.3d 46, 53 (2d Cir. 2010)).

With these general observations and standards in mind, the court turns to the specific objections to the EIS raised by Plaintiffs.

COUNTS ONE AND THREE CONSIDERATION OF IMPACT OF MEASURES TAKEN TO MITIGATE AIRCRAFT NOISE

All jet aircraft are loud and military jets are particularly so. The leadership at VANG has engaged in efforts to reduce the impact of noise on the surrounding community. These efforts have taken the form of operational restrictions on take-offs, time and frequency of flights, the use of flight simulators for training, and other efforts to mitigate the thunder of the engines of aircraft passing over the densely settled neighborhoods of Winooski and South Burlington.

In addition to training flights by the F-16 squadron, Burlington International Airport is used by multiple airlines, chartered planes, and private aircraft. There are currently 97,393 civilian flights per year. F-16 flights number 8,099 per year. The F-35 will fly 5,486 times per year. There are also 6,264 flights by other military aircraft which are passing through but are not based in Burlington. (AR 00010646, EIS at BR4-20.)

Efforts to reduce the effect of airport sound on residents have taken a dramatic turn in South Burlington. Commencing in 1992, the City of Burlington—which owns and operates the airport through a city commission—has bought and demolished homes in a zone close to the runways. This program is authorized and funded by the Federal Aviation Administration ("FAA"). It has resulted in the removal of 139 homes built in the years before the airport became as active as it is today. This program is known as the Part 150 program.⁴ It is run by the City of Burlington, as owner of the airport with oversight and funding from the FAA.

The parties agree that the F-35 aircraft is a louder aircraft than the F-16 aircraft presently operating from the Burlington airport. The F-35 is larger and more powerful. The EIS states that "the F-35A would generate generally higher noise levels than the F-16 aircraft it is replacing except in afterburner take-off." (AR 00010649, EIS at BR4-23.) It is undisputed that the replacement of eighteen F-16 aircraft with eighteen F-35 aircraft will increase the area and the number of people affected by high levels of noise in the vicinity of the Burlington airport.

The principal criticism leveled by Plaintiffs against the EIS regarding noise is the claim that Defendant failed to give sufficient consideration to mitigation measures directed at reducing the impact of noise, especially as it will affect Winooski and South Burlington. Plaintiffs draw

⁴ So named because the regulations that govern the program are set forth in Part 150 of Title 14 of the Code of Federal Regulations. The Part 150 program is discussed in greater detail below.

attention to the purchase and razing of 139 homes in South Burlington in neighborhoods adjacent to the airport.

In response, Defendant points out that neither the Air Force nor VANG has ever been involved in the Part 150 program. The EIS notes the existence of the program which, Defendant says, is all that is required.

Before reaching the specific issue in dispute, it is necessary to review the treatment of aircraft noise in the EIS.

In Chapter 3, the EIS opens the consideration of the environmental impact of noise with a discussion of the ways in which noise is measured and assessed. (*See* AR 00010576, EIS at 3-6.) Noise is defined as unwanted sound. Like any sound, it can be measured in decibels (dB) with zero being the limit of human perception. Normal human speech registers at 60 dB. People typically experience discomfort within their ears at 120 dB. In order to replicate the experience of a human being (in contrast to, say, dogs, which can hear sounds at a wider range of frequencies), decibels are typically measured on a scale which begins and ends at the frequency limits of human hearing. This scale is described as dBA.⁵

In addition to volume, noise must be evaluated on the basis of duration and frequency.

Noise at 60 dB—the sound level of conversation—might not make the ears ring, but few would wish to have it present in their home day and night. Similarly, a fire station siren such as the 8:50 a.m. and p.m. siren which resonates over the City of Rutland in a twice-daily test is accepted by residents (and loved by some) despite its volume because it is short in duration and relatively infrequent.

⁵ The EIS adopts a convention under which the dB unit refers to the A-weighted sound levels (dBA). (AR 00010577, EIS at 3-7.) The court does the same here.

The EIS adopts an averaging process for measuring the duration, frequency, and volume of noise generated by aircraft operations. (*See* AR 00010577, EIS at 3-7.) The methodology described in Chapter 3 of the EIS requires a measurement of the "sound exposure level" ("SEL") for a flight overhead. The SEL includes the total exposure to sound over the duration of the audible overflight of an aircraft. The SEL can then be incorporated into a Day-Night Average Sound Level ("DNL"), which permits the comparison of the noise of one activity with that of others. The DNL is the standard form of noise measurement employed by the FAA, the United States Department of Housing and Urban Development, the Department of Defense, and other federal agencies.

The EIS adopts 65 dB DNL as the level of noise at which most people will begin to experience irritation, noting:

Most people are exposed to sound levels of 50 to 65 dB DNL or higher on a daily basis. Research has indicated that about 87 percent of the population is not highly annoyed by outdoor sound levels below 65 dB DNL (Federal Interagency Committee on Urban Noise [FICUN] 1980). Therefore, the 65 dB DNL noise level is typically used to help determine compatibility of military aircraft operations with local land use, particularly for land use associated with airfields.

(AR 00010578, EIS at 3-8.) Noise above 65 dB DNL level is unwelcome, and the rate of irritation or undesirability increases more rapidly than a straight arithmetic projection. An increase of 15 dB DNL would be a 23 percent increase over the baseline of 65 dB, but a measure of 80 dB DNL is experienced as far more annoying than a simple 23 percent increase. The EIS acknowledges that each increase of 10 dB results in a perceived doubling in loudness. (AR 00010577, EIS at 3-7.)

The EIS also considers the noise generated by military aircraft in flight operations conducted away from the Burlington airport. (AR 00010666, EIS at BR4-40.) After take-off, military aircraft conduct training flights in less inhabited areas. The sound generated by these

operations is intermittent and results in disruption and environmental impact due to its unexpected or startling quality. In addition, the EIS considers the impact of supersonic operations which are accompanied by a sonic boom. These last two metrics are not relevant to operations in and around an airport which are primarily concerned with take-off and landing.

As well as the noise metrics summarized above, the EIS also includes a series of "supplemental noise analyses" that seek to measure the practical effect of the noise generated by aircraft operations near the airfield. (AR 00010579, EIS at 3-9.) These supplemental noise analyses consider interruption of speech (the pause in conversation or classroom instruction when a plane passes overhead), interruption of sleep, potential for hearing loss, and workplace noise.

Finally, the EIS uses two software programs (Noisemap 7 and INM) to map or model the expected noise levels on to the landscape surrounding the Burlington airport. (*See* AR 00010582, EIS at 3-12.) These programs make use of actual noise measurements and data such as census information to approximate the impact of aircraft operation on the human population and to compare it with baseline measurements. In this way, the proposed change can be evaluated in a measured, objective manner.

With these principles in mind, the court turns to the consideration in the EIS of projected changes in aircraft noise levels attributable to the proposed operation of the F-35 in the vicinity of the Burlington airport.

The EIS includes detailed studies of baseline levels of noise generated by the current F-16 operations and the projected levels of noise generated by the F-35 aircraft. The EIS opens its discussion by recognizing that the F-35 is a noisier aircraft than the F-16: "[sound exposure level and maximum sound level data] indicate that the F-35A would generate generally higher noise

levels than the F-16 aircraft it is replacing except in afterburner take-off." (AR 00010649, EIS at BR4-23.) The EIS then sets out the measurement of this increase in several ways. These include maps showing the contour of populations experiencing aircraft noise at average decibel levels between 65 and 80, incidents of speech interference, incidents of classroom interference, and potential hearing loss. The F-16 operations generated observable values in all categories. For example, at a contour on the map drawn at exposure to 65 decibels or higher, current aircraft noise affects 1,963 acres, 4,602 individuals, and 1,966 households. (AR 00010650, EIS at BR4-24.)

In general, almost all noise measurements rose when the operation of F-35s were modeled. These increases were observable and significant. For example, the operation of eighteen F-35s increased the footprint of noise exposure at 65 decibels or more by an additional 289 acres, 2,061 individuals, and 997 households. (AR 00010656, EIS at BR4-30.) The difference dropped quickly as the decibel level (dB DNL) rose. There was no increase in people or acres exposed to more than 85 decibels. The data are detailed and copious. They document a significant increase in noise across all measurements, which is unsurprising for the move to a larger, more powerful aircraft.

Plaintiffs do not claim that the EIS falls short in documenting these consequences.

Instead, their claim is that the EIS fails to consider a different noise-related consequence, which is the possibility that the municipalities within the expanded noise contours will make use of the Part 150 program operated by the FAA to demolish additional neighborhoods in South Burlington and Winooski. They contend that the EIS fails to consider that "nearly seven thousand residents who will experience noise levels incompatible with residential use if F-35 aircraft are based at Burlington will experience no 65 d[B] DNL noise if the F-35 aircraft are not

based in Burlington." (Doc. 42-1 at 10.) Plaintiffs then note that the Winooski City Council had raised the specter of a large empty noise zone within Winooski. In Plaintiffs' view, the failure of the EIS to consider either the razing of many acres of a densely settled city or the cost of retrofitting hundreds of homes and other buildings with soundproofing demonstrate the failure of the EIS to consider the full range of mitigation measures.

Plaintiff's argument fails to recognize both the discussion of the Part 150 program in the EIS and the factors which make it unlikely that the demolition of Winooski neighborhoods will occur. In order to understand these issues, it is necessary to consider the nature of the Part 150 program and its use by the City of Burlington.

Commencing with passage of the Aviation Safety and Noise Abatement Act of 1979, Pub. L. No. 96-193, 94 Stat. 50 (codified as amended at 49 U.S.C. §§ 47501–47534), the FAA has been authorized to issue comprehensive regulations governing airport noise. These appear at 14 C.F.R. Part 150. They include authority to regulate civil airport operations in many respects and to work with airport operators and local municipalities to reduce the impact of noise on nearby communities. An airport operator seeking FAA funding for noise mitigation can submit an Airport Noise Compatibility Program ("NCP") to the FAA for review. The NCP must be developed through consultation with local government. If approved by the FAA, it can provide funding for acquiring existing buildings and relocating the inhabitants, as well as less drastic measures such as land use controls, disclosure to potential purchasers, and building insulation programs. *See* Overview, The FAR Part 150 Airport Noise Compatibility Planning Program, https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/II.B.pdf.

As the owner of the Burlington airport, the City of Burlington prepared a two-volume NCP program in 1989. The NCP was approved by the FAA in 1990. The Burlington airport acquired 59 homes between 1992 and 2007. In 2008, the airport updated the NCP and related planning documents. It acquired 54 additional homes between 2008 and 2012. All purchases have been on a voluntary basis. As of 2012, 26 additional properties were scheduled for purchase bringing the total over 10 years to 139 homes with priority given to homes closest to the airport. See City of Burlington, The Airport Residential Land Program,

https://www.burlingtonvt.gov/legacy.php?itemID=10180; see also In re Burlington Airport Permit, 2014 VT 72, ¶ 3, 197 Vt. 203, 103 A.3d 153.

As the EIS demonstrates, many thousands of other homes are currently located within the 65 dB zone in South Burlington and Winooski. None are under consideration for purchase and demolition except for approximately two dozen homes located in neighborhoods adjacent to the airport in South Burlington. *See* City of Burlington, *The Airport Residential Land Program*, https://www.burlingtonvt.gov/legacy.php?itemID=10180.

With this factual background in mind, it is clear that the demolition of homes in Winooski is a potential mitigation factor which received appropriate consideration in the EIS. First, on the current record, there is no evidence that any property owner outside of a few neighborhoods in South Burlington is likely to be subject to such a program. The Burlington NCP does not call for it. Part 150 makes it clear that an NCP calling for acquisition of property with federal funds must include the participation of municipal government. *See* 14 C.F.R. § 150.23(d) (requiring airport operator to afford an "adequate opportunity for the active and direct participation of the States, public agencies and planning agencies in the areas surrounding the airport" to submit their views, data, and comments on the formation and adequacy of any

NCP). The City of Winooski, which is a party to this lawsuit, will have significant influence over any decision to remove homes within its boundaries. The Winooski City Council has already passed resolutions and a statement opposing such measures and seeking the installation of soundproofing instead. (*See* AR 00052074, 00053121, 00060954.) The homeowners themselves have a say since the Burlington acquisition program has been voluntary.

Despite obvious doubt about whether the City of Burlington, the City of Winooski, the residents of Winooski, and the FAA will join in a demolition program similar to the one which has operated in South Burlington, the EIS directs attention to this possibility. Although an expansion of home purchases pursuant to the NCP is uncertain, the EIS addresses the existence of Part 150 and the various forms of relief which the FAA may afford to homeowners:

While the Air Force and Air National Guard have no plans to acquire or demolish residences as part of the F-35A beddown, the City of Burlington has indicated that they are considering updating the Part 150 Noise Exposure map and Noise Compatibility Program to include F-35A operations. The update would not affect current participants in the Airport's existing voluntary land acquisition program. The City has indicated they anticipate that a new Noise Compatibility program would need to be developed that may include many facets to address noise, including, home purchase, sound insulation, and land based noise mitigation measures. This is an action that is taking place under the aegis of the FAA and the City of Burlington under the Noise Compatibility Program. The Burlington [Air Guard Station] would continue to undertake the voluntary restrictions prescribed in the Aircraft Operations Measures (Nos. 5, 6, and 7) outlined in the Burlington International Airport, Part 150 Record of Approval (June 2008).

(AR 00010645, EIS at BR4-19.)

This discussion is sufficient to identify potential mitigation measures which lie within the control of the City of Burlington and the FAA. Plaintiffs are correct when they state that the EIS does not delve deeply into the likelihood that a Part 150 demolition program or an alternative FAA program providing for soundproofing will take place. Defendant responds that the Air Force is not required to predict and describe mitigation efforts that other agencies might employ.

They describe the Part 150 program correctly as lying within the authority of the City of Burlington to initiate and the FAA to administer. Since Defendant has no role in requesting, approving, or administering the program, it is not a mitigation measure which the Air Force can or should describe in any greater detail than now appears in the EIS.

An expansion of the demolition project would require complex policy decisions by the municipalities involved as well as the FAA. Defendant has no basis for forecasting the direction the program will take in the future. As Defendant points out in her memorandum, it would be irresponsible to raise public expectations or alarm by speculating about the potential purchase or improvement of homes by other governmental agencies when there is no objective basis for such a prediction. (Doc. 55 at 31.)

The principal case defining the obligation of a federal agency preparing an EIS to address mitigation measures that lie within the control of local government remains *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989). In *Robertson*, the development of a ski area on federal land presented risks to air quality and to the mule deer herd. Mitigation of these impacts lay not within control of the United States Forest Service, but rather within the scope of local zoning and air-quality measures at the county level. The EIS identified these measures, but did not condition the proposed action on their enactment. Much as in the present case, the existence of measures to mitigate environmental harm which lay beyond the control of the Forest Service were not evaluated in depth.

The United States Supreme Court approved the approach taken by the Forest Service.

The Court recognized the obligation of the EIS to "contain a detailed discussion of possible mitigation measures." *Id.* at 351. The decision observed that "[t]here is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail to

ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other hand." *Id.* at 352. When the mitigation measures lie beyond the authority of the agency and within the control of others, there is no requirement that the federal agency predict and explain such measures. Instead, the federal agency's obligation is to provide a reasonably complete description of possible mitigation efforts available to third-parties. *See* 40 C.F.R. § 1502.14(c) (requiring that EIS "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency"). This obligation is less than the obligation to provide a complete analysis of actions that the agency drafting the EIS proposes to take.

Detailed consideration of the potential acquisition of homes in Winooski or an expansion of the existing program under Burlington's NCP is impractical because little or no information is available about its likelihood, scope, cost, or direction. These matters lie beyond the knowledge and control of the Air Force. They also lie beyond the ability of the Air Force to finance—the parties agree that funding for any demolition or soundproofing is available only through the FAA as part of its authority over civil aviation.

An expansion of the NCP is also not a matter which has been addressed in a public way by the City of Burlington. Burlington could take such action by preparing a revised NCP. An expansion of the existing NCP would require additional studies, mapping, public notice and participation, including the participation of the City of Winooski, as well as FAA review and approval. *See, e.g.*, 14 C.F.R. § 150.23(d). But who knows if the City of Burlington will approach the FAA to seek funding for demolition or soundproofing in areas beyond the South Burlington neighborhoods already involved in this program? The current program, which is relatively modest in scope, has engendered litigation before the Vermont Environmental Court

and the Vermont Supreme Court. *See In re Burlington Airport Permit*, 2014 VT 72. An expansion of a controversial program into Winooski—which at present appears firmly opposed—would not be for the faint of heart.

The mitigation measure of adding soundproofing to existing homes is also permitted under the Part 150 program. It has never been employed by the City of Burlington and the FAA in the two decades during which Burlington has purchased and razed homes. It was identified as a favored course of action by the Winooski City Council. The EIS refers to the potential availability of such measures without attempting to predict whether Burlington and the FAA will revise the NCP to provide such measures to residents affected by noise. (AR 00010645, EIS at BR4-19.)

Defendant has control over the operation of Air Force aircraft, and Plaintiffs have no quarrel about the disclosure of operational measures to mitigate noise. These measures include restrictions on hours of flight and a prohibition on the use of afterburners at take-off. Defendant has no control over the possibility that the City of Burlington and the FAA will decide to expand the current Part 150 program. The EIS identifies the program without taking a position on the likelihood or desirability of expanding it. Because the Part 150 program lies outside the authority of the Air Force and VANG, the EIS meets the requirements of NEPA by calling attention to the existence of the program without offering any prediction about whether the City of Burlington will take the legal and political steps required to expand it.

The court does not agree with Plaintiffs that NEPA requires Defendant to project the cost of destroying the thousands of homes which lie within the 65 decibel level zone. Similarly, there is no legal basis for requiring Defendant to calculate the cost of soundproofing all these homes.

Both the number of homes lying within the expanded 65 dB zone and the approximate cost of

acquiring them could be estimated. The problem is that the likelihood that such an enormous municipal project could take shape lies beyond the reasonable consideration of mitigation measures. It cannot be excluded, but in the absence of any showing of support from any of the cities involved or the FAA, a calculation of demolition and acquisition costs would be highly speculative and therefore beyond the requirements of NEPA.

Plaintiffs' remaining complaints about the treatment of the issue of noise in the EIS concern comparisons between the effect of the F-35 deployment in a densely settled area such as Chittenden County and the more remote air bases available as alternative sites. That issue also receives consideration. The parties agree that fewer residents means less disruption of residents' lives by noise. This is less a methodological objection, however, than it is a disagreement about the policy choices made by Defendant. The information about the relative impact of noise at various air bases appears in the EIS. Plaintiffs take issue with the decision, not with the lack of disclosure of information.

COUNT TWO POTENTIAL CONFLICT WITH STATE AND LOCAL LAND USE LAWS

Plaintiffs contend that the EIS fails to meet the requirements of NEPA because there was insufficient consideration of possible conflict with state and municipal land use law and plans. Defendant responds that neither Vermont's Act 250,⁶ Vermont's principal land use statute, nor municipal zoning or land-use ordinances apply to VANG operations so there can be no conflict. They also contend that the EIS acknowledged and weighed many of the specific harms that local law is intended to address, such as impact on low income areas.

⁶ Act 250 is a permitting system "intended to regulate and control development so that it will not be unduly detrimental to the environment and orderly growth will be promoted." *In re Request for Jurisdictional Op.*, 2015 VT 41, ¶ 7, 198 Vt. 510, 117 A.3d 457; *see also* 10 V.S.A. § 6081(a).

The CEQ regulations, which govern the application of NEPA, contain two provisions concerning state and local laws. First, § 1506.2(d) requires an EIS to consider any "inconsistency of a proposed action with any approved State or local plan and laws." 40 C.F.R. § 1506.2(d). If there is an inconsistency, the EIS "should describe the extent to which the agency would reconcile its proposed action with the plan or law." *Id.* Second, § 1502.16(c) requires consideration of "[p]ossible conflicts between the proposed action and the *objectives* of Federal, regional, State, and local . . . land use plans, policies and controls for the area concerned." 40 C.F.R. § 1502.16(c) (emphasis added).

These regulations require the court to consider two different questions. First, does the proposed agency action violate state or local law? And second, does the proposed action defeat the objective of state or local law or land use plans?

It is clear that neither state law nor local ordinance constrains VANG operations. The Vermont Supreme Court reached this conclusion with respect to Act 250. In *In re Request for Jurisdictional Op.*, 2015 VT 41, 198 Vt. 510, 117 A.3d 457, opponents of the siting of the F-35 aircraft sought to invoke Act 250 jurisdiction over improvements to the hangar structures and the additional noise generated by F-35 operations. *Id.* ¶ 1. The Vermont Supreme Court rejected these arguments on grounds of federal preemption and statutory construction. Because the basing of the F-35 aircraft serves a federal purpose and not a state purpose, the hangar improvements required to service and care for the aircraft fall outside Act 250 jurisdiction. *Id.* ¶¶ 10–19. The use of the runways is subject to an Act 250 permit, but that permit does not open the airport to state regulation on all issues. *Id.* ¶¶ 24–31. The Vermont Supreme Court recognized that principles of federal preemption require that noise generated by aircraft be regulated by federal, not state law. *Id.* ¶31. In short, there is no possibility of conflict between

Act 250 and Defendant's proposed action because the highest court in Vermont has recognized that Act 250 does not apply.

Similarly, municipal land use law does not govern flight operations, civil or military, on grounds of federal preemption. *See City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624 (1973) (invalidating municipal ordinance prohibiting aircraft from taking off during certain nighttime hours). In the absence of a conflict, 40 C.F.R. § 1506.2(d) does not apply.

Section 1502.16(c) is broader in scope. It requires consideration of conflict between the proposed action and objectives of federal, state, and local law as well as local land use plans. Plaintiffs argue that the EIS fails to address the possible conflict with the goals of Act 250, the South Burlington Nuisance ordinance, and the municipal development plans of South Burlington and Winooski. All of these measures may be preempted by federal law and therefore not binding upon the Air Force, but Plaintiffs observe that these laws and plans favor the protection of the population from unwanted noise. Plaintiffs criticize the EIS for failing to address this possible conflict between the agency action and the objectives of the municipal provisions.

In response, Defendant states that the detailed evaluation of the change in sound levels and mapping of noise contours in the EIS provide a basis for evaluating any potential conflict with local land use laws and plans. A greater degree of specificity is not possible for two

⁷ Section 4 of the South Burlington Nuisance ordinance states:

[&]quot;It shall be unlawful for any person to make or cause to be made any loud or unreasonable noise. Noise shall be deemed to be unreasonable when it disturbs, injures or endangers the peace or health of two or more unrelated people or when it endangers the health, safety or welfare of the community. Any such noise shall be considered to be a noise disturbance and a public nuisance."

reasons. State and municipal law do not apply for reasons of preemption, and measures such as Act 250 and the South Burlington Comprehensive Plan provide few specific standards for measuring conflict. What standards there are translate poorly into a dispute over aircraft noise.

For example, Plaintiffs observe that "[c]riterion 8 of Act 250 has been repeatedly interpreted as protecting residential areas and 'areas of frequent human use' from noise exceeding 55 dB Lmax (i.e., instantaneous noise)— a standard that F-35 noise will violate multiple times daily." (Doc. 42-1 at 34.) Current levels of military aircraft noise greatly exceed this standard. The F-16 aircraft generate values on take-off and landing of between 94 and 66 dB Lmax, and the F-35A values are between 115 and 83 dB Lmax. As these numbers indicate, military jet planes are loud. Any landing or take-off by either an F-16 or an F-35 greatly exceeds Act 250 limits as these have been developed by the regional Act 250 administrators. The sound limitations developed by Act 250 administrators for land-based developments do not compare easily with the noise generated by an airport.

Similarly, the South Burlington Nuisance ordinance prohibits all "loud or unreasonable noise . . . [which] disturbs, injures or endangers the peace or health of two or more unrelated people or when it endangers the health, safety or welfare of the community," noting that "[a]ny such noise shall be considered to be a noise disturbance and a public nuisance." (Doc. 25 at 15.) This is a subjective standard which could be violated every time a jet plane—military or commercial—flies overhead. Like most noise ordinances, the South Burlington ordinance is drafted so as to encompass a wide variety of noisy human activities. It places discretion with

⁸ The dB Lmax unit is a measure of the maximum sound level of a single discrete noise event.

⁹ These numbers represent the maximum sound levels over the course of a take-off or landing. The weighted average values are different

those charged with enforcement and expresses the community's preference for maintaining peace and quiet.

The provisions of the South Burlington Comprehensive Plan are even more general and aspirational:

[P]roviding for housing is a fundamental element of the Plan. . . Existing and developing residential neighborhoods shall be identified and protected through appropriate zoning and responsible site planning. Many of these residences constitute an irreplaceable, lower cost segment of the City's housing stock.

(AR 00019479.) As noted by Defendant, the Plan does not provide a proscriptive set of rules, but rather provides "a framework and guide" which "states goals and objectives and recommends courses of action." (AR 00019472.) The Plan notes that its recommendations "are not mandates, but are suggestions to help guide the operations of the City and its citizens." (*Id.*) In the absence of specific sound measures and other requirements, an action such as basing the F-35 aircraft does not violate the Plan except in the broad sense that any activity which generates noise runs contrary to the planners' desire for quiet. Like the South Burlington Nuisance ordinance, the Plan favors peace and quiet. It could not be otherwise. No city plan would seek to increase noise. It is fair to say that South Burlington, through its nuisance ordinance and its Plan, have made peace and quiet a community objective.

The EIS does not ignore the objective of state and local government to protect the population from noise disturbance. As Plaintiffs point out, the EIS does not analyze whether it would be in violation if the above provisions applied to VANG. But the provisions do not apply and assuming for the sake of argument that they do would be misleading. Instead, the EIS describes in detail the baseline impact which VANG operations now have on different types of land use and the likely increase imposed by the F-35. These measures include average decibel levels for uses such as schools, churches, residential neighborhoods, and hospitals. They also

include the impact on different types of land use such as farmland and commercial zones. One might describe this as a functional review of the impact of noise on local land use measures. It identifies the types of uses which flow from zoning limitations, Act 250, and other local measures, and then considers the baseline and future proposed impact of the agency's activities on these uses.

The CEQ's guidance on compliance with NEPA offers general advice about the duty of a federal agency to consider the objectives of local land use regulations. *See* Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026 (1981). In response to the commonly asked question of "[h]ow should an agency handle potential conflicts between a proposal and the objectives of Federal, state or local land use plans, policies and controls for the area concerned," the CEQ offers the following guidance:

The agency should first inquire of other agencies whether there are any potential conflicts. If there would be immediate conflicts, or if conflicts could arise in the future when the plans are finished . . ., the EIS must acknowledge and describe the extent of those conflicts. If there are any possibilities of resolving the conflicts, these should be explained as well. The EIS should also evaluate the seriousness of the impact of the proposal on the land use plans and policies, and whether, or how much, the proposal will impair the effectiveness of land use control mechanisms for the area. Comments from officials of the affected area should be solicited early and should be carefully acknowledged and answered in the EIS.

Id. at 18033.

Defendant clearly met the first obligation which was to engage with local government. In July 2003, the City Councils of South Burlington and Winooski held special meetings to discuss the project. (AR 00010643, EIS at BR417.) These municipalities actively considered the basing controversy. The Winooski City Council passed measures to oppose the basing unless Defendant could provide assurances that there would be no increase in noise experienced in the affected residential areas. The City of Winooski intervened as a plaintiff in this case. The City

of South Burlington was slower to take a stand, but the Planning Commission issued a comment to the revised draft EIS ("RDEIS") which criticized the impact of noise on the City's neighborhoods. (AR 0008397, RDEIS at E-1258.) Ultimately the City Council voted to authorize the filing of an amicus brief in this lawsuit. The EIS was prepared in a very public setting with an opportunity for municipal leaders to express their reservations and opposition to the increased noise levels in their communities.

The second issue is whether the EIS adequately acknowledges the conflicts. As already stated, the notion of a conflict with local measures which are preempted takes us into the realm of theory. There can be no direct "conflict" with a provision that does not apply. But certainly there may be a conflict in objective and purpose. The EIS describes its interaction with members of the public through the comment process in detail, both at the time of initial "scoping" and later in special City Council meetings. (AR 00010641–43, EIS at BR4-15–17.) Both support and opposition are considered.

The question which was not answered directly in the EIS was whether there is a potential conflict between the stated objective of local zoning and land use laws and the proposed action. But those objectives are expressed only as general prohibitions against excessive noise. Plaintiffs can identify no local noise standards against which Defendant can measure its action. The Act 250 standard of 55 dB is a common-law rule developed through the local hearing process. See Big Rock Gravel Act 250 Permit, Docket No. 45-3-12 Vtec (Vt. Super. Ct. 2012); see also McLean Enters. Corp., No. 2S1147-1-EB (Vt. Envtl. Bd. 2004); Alpine Stone Corp., No. 2S1103-EB (Vt. Envtl. Bd. 2002). The maximum sound level is so low that it is violated by all current take-offs and landings by the F-16 squadron. If it applied to the airport—which it does not—the conflict would be long-standing and unchanged except as to degree by the proposed

action. Similarly, the prohibition against unreasonable noise in the South Burlington Nuisance ordinance provides no basis for concluding that there is an unaddressed conflict in objectives.

The existing and proposed noise levels were described in the EIS in detail. Whether these exceed the subjective standard of the ordinance is not possible to determine.

The court concludes that the EIS gives sufficient consideration to local land use laws and plans to satisfy the requirements of NEPA. It meets this requirement by providing notice and a detailed discussion of the consequences of the proposed action in various land use zones, particularly as they concern noise. The parties are in effect talking past one another. Plaintiffs seek a ruling requiring Defendant to review local law, which does not apply and which sets no specific standards, to determine if the proposed action violates the purpose of these provisions. Defendant has prepared an EIS which lays out the facts concerning exposure to increased noise, but does not discuss whether local noise ordinances, Act 250, or the general language in municipal plans for residential development are in conflict with the proposed action.

To the extent that the local provisions are read to oppose unreasonable noise in general, the EIS clearly addresses these community concerns. The discussion of increased noise forms a major part of the EIS. In this respect, the EIS serves its dual purpose of forcing the agency to consider the likely impact of its action on people living close to the airport and putting the public on notice of the facts underlying its decision. Because the local measures do not govern the agency action or contain specific standards for noise, NEPA does not require the agency to consider their effect if, for purposes of argument, they were deemed to apply. Similarly, because the various city planning documents are advisory and only suggestive of the types of development decisions the cities favor, the EIS cannot engage in a discussion of inconsistency. See Audubon Naturalist Soc'y of the Cent. Atl. States, Inc. v. U.S. Dep't of Transp., 524 F. Supp.

2d 642, 714 (D. Md. 2007) (explaining that there can be no inconsistency with a plan that merely expresses preferences).

COUNT FOUR FAILURE TO ADDRESS IMPACT ON HISTORIC DISTRICTS

In a manner similar to Count One, Plaintiffs complain that the EIS failed to consider the possible demolition of homes within the historic districts of Winooski. Winooski is an old city, and it includes two related sites on the National Register of Historic Places: the Winooski Falls Mill District and the Winooski Falls Mill Historic District. Following an exchange with the Vermont State Historic Preservation Office, the RDEIS documented the inclusion of these districts within the likely 65 dB DNL zone generated by the F-35 operations. (AR 00008807, RDEIS at BR4-62.)

As Defendant points out in her brief, NEPA does not require discussion of the impact of agency action on individual historic structures. *See N. Idaho Cmty. Action Network v. U.S. Dep't of Transp.*, 545 F.3d 1147, 1156 (9th Cir. 2008) (per curiam). The National Historic Preservation Act, 54 U.S.C. §§ 300101–300321, imposes a separate duty on federal agencies to consider the impact of a proposed activity on historic properties. That issue is not before the court. And for the reasons previously discussed, the possible purchase of homes in Winooski by the City of Burlington falls beyond the required reach of the EIS. The EIS does provide discussion of the likely impact of increased noise within the historic districts. The contour maps and other information provided about interruption of conversation and sleep, as well as consequences of jet aircraft noise, offer a detailed discussion about the environmental impact within the historic district zones. There is no further requirement that Defendant catalog historic structures or documents the environmental impact building by building.

For essentially the reasons covered in the discussion of Count One above, the court concludes that the consideration of environmental impact on the historic districts within the City of Winooski meets the requirements of a "hard look" under NEPA.

COUNT FIVE POSSIBLE RETIREMENT OF THE F-16 FLEET

Plaintiffs argue that since the existing F-16 aircraft will reach retirement in 2018, the EIS uses the wrong baseline of "no action" alternative. They contend that instead of comparing the current experience of regular F-16 operations with the increased noise of F-35 operations, the EIS should have started with a baseline of no military jet noise and a VANG base devoted to the operation of drones or other activities not involving landing and take-off of jet aircraft.

Defendant responds that termination of VANG operations is not a likely outcome even if the F-35 aircraft are based elsewhere. The EIS is drafted from the perspective that military jets of some description will continue to be flown by VANG and that there is no reason to believe the base will be closed and the squadron disbanded even if the F-35 aircraft are based elsewhere.

Defendant is correct that the record contains no evidence to support the conclusion that military jet operations will end in 2018. The evidence is to the contrary. The Air Force has stated its commitment to fighter operations in Burlington even if the F-35 is based elsewhere. (AR 00008552, RDEIS at PA-47.) Because an EIS is at its heart a comparison of the present against the future, analysis has to start with current conditions in the absence of evidence of an impending change in circumstances. *See Biodiversity Conservation All. v. U.S. Forest Serv.*, 765 F.3d 1264, 1269 (10th Cir. 2014) (citation omitted). The CEQ regulations also recognize this principle. *See* 46 Fed. Reg. at 18027.

The parties agree that the current F-16 aircraft in use by VANG will reach the end of their useful life in 2018. They also agree that Defendant's current plan is to replace them with

their disclosure. What NEPA does not require is the disclosure of plans which do not exist. In other words, there is no evidence of a plan to close the base or to use it for purposes other than flying aircraft. In light of the 70 year history of flight operations and the insistence of VANG that continued flight operations are contemplated, the court will not require Defendant to consider closure or repurposing of the base as an alternative course of action in the EIS.

In Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., the United States Supreme Court set limits on NEPA's requirement that a federal agency consider all alternatives to a proposed action. See 435 U.S. 519, 551 (1978) (citing 42 U.S.C. § 4332(C)). The Court instructed that "the concept of alternatives must be bounded by some notion of feasibility." Id. The Court noted that "[c]ommon sense . . . teaches us that the 'detailed statement of alternatives' cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man." Id. "Feasibility" is not the measuring stick in this case. Any base can be closed, and new uses are always possible. But, as in Vermont Yankee, common sense imposes limits on the alternatives which must be considered in an environmental statement. Without some reason to believe that Defendant or VANG intends to stop flying military aircraft at the Burlington airport, there is no basis for requiring supplementation of the EIS to consider remote or unlikely policy decisions.

The court concludes that the EIS properly considered the difference in environmental impact posed by the current F-16 squadron and the proposed F-35 squadron. That comparison reflects the appropriate consideration of current conditions with future conditions. In the absence of evidence that an alternative such as base closure or use for purposes other than the basing of

aircraft is under consideration, there is no basis for requiring the EIS to include such remote alternatives.

COUNTS SIX and NINE CONSIDERATION OF ENVIRONMENTAL CONDITIONS IN EVENT OF A CRASH

Following issuance of the EIS, Plaintiffs obtained a memorandum drafted by a retired Department of Defense employee and a South Burlington City Councilor (the "Greco-Sprey memo"). The memo outlines the authors' views of the environmental risks presented by an F-35 crash. In the authors' opinion, a crash of a "stealth" aircraft with a high percentage of composite elements presents a risk of exposure to toxic gas and smoke far greater than the risks presented by the crash of a conventional jet aircraft. The Greco-Sprey memo identified the stealth surface coatings and the carbon fiber composite materials used to construct the F-35 as the source of toxic discharge and an elevated risk of injury.

On the strength of the Greco-Sprey memo, Plaintiffs requested that Defendant prepare a Supplemental EIS ("SEIS"). Defendant ordered Lieutenant Colonel Victor Caravello, the Air Force's then Director of Occupational Health Policy, to conduct a review of the issues raised by the request. Lt. Col. Caravello produced a memorandum, concluding that composite materials are commonly used in all types of jet aircraft. The crash of an F-35 would present risks to residents and emergency personnel similar to those presented by any crash of a jet aircraft and require a hazardous material response. A jet consumed by fire following a crash would present a serious chemical hazard regardless of whether it was equipped with stealth coatings. Following receipt of Lt. Col. Caravello's memo, Defendant declined to draft and issue an SEIS concerning the hazards presented by a potential crash. This court previously declined to include the Greco-Sprey memo in the record of this case. (See Doc. 38.)

In reviewing an agency's decision to decline to produce an SEIS, the court must determine whether the agency took a "hard look" at the information presented, and whether the agency's decision, based on what it learned, was "arbitrary or capricious." *See Nat. Res. Def. Council, Inc. v. FAA*, 564 F.3d 549, 561 (2d Cir. 2009) (citation omitted). The "arbitrary and capricious" standard is a higher standard than the court's deferential review of what the agency included and omitted from the EIS. Judgment for Plaintiffs on the ground that the agency refused to prepare an SEIS following the submission of new information requires a finding of a "clear error of judgment" on the part of the agency's personnel. *See Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 378 (1989). This higher standard of review is necessitated by the need for finality in the preparation and release of the EIS. If the standards were the same, withdrawal and supplementation of every EIS as new information became available would become the norm.

In this case, Lt. Col. Caravello took a thorough look at the concerns raised by the Greco-Sprey memo and Plaintiffs' counsel. He reviewed the presence of composite materials in all modern jet aircraft, commercial and military, as well as motor vehicles, boats, and buildings. He determined that the emergency response to any fire involving composite materials was similar and well-understood by fire departments and other responders. The crash of any military jet would likely result in the declaration of a National Defense Area so as to provide control and safety measures over the crash site. Lt. Col. Caravello's views were supported by other experts within the agency.

There is insufficient record evidence that an F-35 crash requires a unique response so as to necessitate special environmental review. The risk of a crash cannot be ruled out, and Defendant has not engaged in false assurances. Flight safety is addressed in the EIS. (AR 00010595–600, 00010675–81, EIS at 3-25–3-30, BR4-49–4-55.) The concern that the coatings

applied to the outside of the aircraft pose an additional environmental hazard was considered and rejected by Lt. Col. Caravello. (AR 00065427–431.) Similarly, Plaintiffs' claim that the use of composite materials in the aircraft, such as carbon fiber, received consideration. Plaintiffs may disagree with the merits of Defendant's decision that neither of these factors required an SEIS, but the record is clear that these concerns received fair and responsible consideration by Defendant.

The court concludes that Defendant did not act in an arbitrary or capricious manner in denying the request for an SEIS. The Air Force assigned an experienced person to consider the issues raised by Plaintiffs. This review was documented in Defendant's Record of Decision ("ROD"). The ROD demonstrates that the environmental issues raised by the Greco-Sprey memo were treated seriously and investigated in a professional manner. The agency's investigation concluded that the facts did not warrant an SEIS. The court reviews that decision for signs of arbitrary or capricious decision-making and finds none.

COUNT TEN COST CONSIDERATIONS

Plaintiffs complain that the EIS failed to evaluate the economic costs of the basing decision. They argue that by omitting discussion of the pending retirement of the F-16 fleet, Defendant kept the replacement cost unrealistically low. Defendant responds that cost was of less importance than "mission," and that the drawdown of the eighteen aging F-16 aircraft currently based in Burlington and their reassignment or retirement was disclosed in the EIS. (AR 00004972, Draft EIS at 2-3.) In selecting Burlington as an F-35 location, Defendant relied on many factors which augured well for the success of the mission. These included the existing infrastructure at VANG and the availability of overland air space for training and practice,

including coalition training opportunities with Canadian aircraft. (AR 00012882–83, ROD at 2–3.)

Disclosure of costs and benefits of agency action are necessary to ensure agency and public examination of the proposed decision. See 40 C.F.R. § 1502.14 (EIS "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis or choice among options by the decisionmaker and the public"). The EIS identifies many of these practical considerations without reducing them to dollar values. See 40 C.F.R. § 1502.23 ("[T]he weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations.") Since the successful accomplishment of "mission" is the salient factor which Defendant identifies as driving the decision reflected in the EIS, the dollar cost of choosing Burlington over another location was never central to the decision-making. Certainly Defendant has discretion in selecting decision-making criteria, and Plaintiffs do not criticize her for valuing "mission" as a criterion. Plaintiffs' claim is narrower. They believe that the cost must have been lower than reported because it did not reflect the likely retirement of the eighteen F-16 aircraft.

The total estimated cost of improvements to the Burlington VANG facilities required to accommodate the eighteen F-35 aircraft is 4.7 million dollars (\$261,000 per aircraft). Other locations are cheaper with Jacksonville, Florida being a mere \$400,000. These are large sums for an individual, but minor expenditures in the case of aircraft costing many millions of dollars apiece. In addition to positive cost, there are savings from locating the F-35 at Burlington because it saves the expense of replacing the aging aircraft with "newer, more advanced fighter"

units that are not being replaced with these F-35As." (AR00012883, ROD at 3.) Plaintiffs complain that these cost-savings were not addressed in the EIS.

There is an aspect of artificiality about Plaintiffs' argument. The EIS begins by disclosing that the F-35 was developed to replace the F-16 and other aircraft. This is hardly a bombshell. It has been an ambitious plan for many years, and the topic of much public discussion. The EIS is drafted with the expectation that the proposed action will result in the arrival of one kind of aircraft and the departure of the other. The out-of-pocket costs associated with the changeover were disclosed to be relatively modest. No new runways are required. The existing hangar space, which is visible from the public side of the airport, requires internal modification. No new buildings are planned. The staff at VANG is evidently well-suited to this new assignment. The F-35 may be the world's single most expensive aircraft, but basing it in one established base or another is not a big expense.

The information which Plaintiffs complain was improperly considered is the cost of replacing the current F-16s with more recent models if the F-35s do not arrive. As the ROD states, "The F-35As at Burlington AGS will negate the need to relocate the front line F-16s (Block 52) at McEntire or the F-15Cs currently stationed at Jacksonville." (AR 00012883, ROD at 3.) Plaintiffs note that the administrative record includes estimates of \$3 million to rebase the McEntire F-16s, and \$4–22 million to rebase the Jacksonville F-15s. (AR 00065329.) Because Plaintiffs believe that Defendant made an independent decision to cease operations at VANG if the F-35 aircraft do not arrive, they believe the cost analysis, including the rebasing expenses, overstates the expense of relocating newer F-16 aircraft to VANG from their current locations. Because they believe that newer F-16 aircraft will not be sent to VANG if efforts to locate the F-

35 fail, they argue that the relocation costs of moving newer F-16 aircraft to VANG is exaggerated.

The fallacy in this argument is that there is no indication in the record that Defendant has decided to close the VANG base if the F-35 does not arrive. The record shows the opposite. Fighter planes of one description or another will continue to be based at VANG. (AR 00008552, RDEIS at PA-47.) Relocating these planes will come with costs. These costs will not be avoided by an undisclosed decision to close VANG or alter its mission to exclude aircraft operations. And, as previously discussed, the cost of basing the F-35 or other aircraft at VANG was never a significant driver of the agency's decision-making.

For these reasons, the court concludes that the analysis of cost of basing the F-35 at VANG was adequately considered in the EIS.

CONCLUSION

The court has determined that the EIS meets the requirements of NEPA. When it is read in conjunction with the supporting documentation, it is clear that Defendant took a "hard look" at the environmental consequences of the basing decision, including the specific areas about which Plaintiffs complain. It is also clear that the EIS process served its second purpose of generating public interest and examination of the agency's decision-making process. The record demonstrates that a large number of Vermont residents turned out for meetings or sent in comments about the process. Finally, the court is satisfied that the decision to locate the F-35 at VANG meets the requirements that the agency action not be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. The EIS documents the adverse environmental changes that basing the F-35 aircraft at VANG will bring to the surrounding community. These changes received thoughtful and detailed consideration. The agency's

decision to locate the aircraft at VANG reflects the trade-offs between Defendant's mission-driven needs and the interests of the community in limiting noise and other environmental impacts that are frequently present in major federal projects. The decision itself cannot reasonably be said to be arbitrary or otherwise in violation of the requirements of the APA and NEPA.

Defendant's Motion for Summary Judgment (Doc. 54) is GRANTED and Plaintiffs' motions (Docs. 42, 45) are DENIED.

Dated at Rutland, in the District of Vermont, this 10th day of August, 2016.

Geoffrey W. Crawford, Judge United States District Court